REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 12-15 are presently active in this case, Claims 12 and 14 having been amended and Claims 1-11 and 16 having been canceled without prejudice or disclaimer by way of the present Amendment. Support for the amendments set forth herein is clearly present in the original disclosure, for example, the drawings and original Claims 4 and 9. Care has been taken such that no new matter has been entered.

The Applicants note that the Amendment After Final filed on April 10, 2006, has not been entered and fully considered. The present Amendment is being submit in place thereof.

In the outstanding Official Action, Claims 1-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kashima (U.S. Patent No. 6,471,559) in view of Katayama (U.S. Patent No. 6,481,411) and further in view of Watanabe et al. (U.S. Patent No. 6,446,594). For the reasons discussed below, the Applicant respectfully requests the withdrawal of the obviousness rejections.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicant submits that a *prima facie* case of obviousness has not been established in the present case because the cited references, either

when taken singularly or in combination, do not teach or suggest all of the limitations recited in independent Claim 12.

Claim 12 of the present application advantageously recites an outboard motor comprising, among other features, an engine cover, an engine disposed inside the engine cover, a throttle body disposed in front of the crankcase, and an intake manifold extending from the throttle body to an intake port formed on the cylinder head and connected thereto, the intake manifold having a shape curved along an inner surface of the engine cover of the outboard motor and having a plurality of intake pipes in a vertical arrangement on a side of the engine. The outboard motor further comprises an intake passage connected to the throttle body on an upstream side thereof, and an intake duct connected to an upstream side of the intake passage and disposed in a space formed between a side surface of the engine and the intake manifold. The Applicant submits that the cited references, either when taken singularly or in combination, fail to disclose or suggest the above limitations.

By way of illustration and not limitation, the present application describes an embodiment in which an intake duct (35) is connected to an upstream end of an intake passage (34). (Page 11, lines 2-6.) The intake duct (35) extends to a space formed between the left-hand wall of the cylinder block (7) and the intake manifold (31). (Page 11, lines 6-8 and Figure 2-4, which depict the duct (35) as being positioned adjacent to a downstream side of the fuel injector unit (40).) The specification describes that the positioning of the intake duct (35) adjacent to a downstream side of the fuel injectors (40), as well as other features of the intake duct, enables the intake manifold (31), which has been cooled by the heat of vaporization of the fuel, to reduce the atmospheric temperature around the intake duct (35).

(Page 14, line 18, through page 15, line 1.) The specification indicates that as a result of this configuration and reduction of the atmospheric temperature around the intake duct (35), an intake temperature can be decreased, thus improving the intake charge efficiency and increasing the engine output.

Additionally, the inside of the engine cover of the outboard motor is different from the inside of the engine room of an automobile, for example, and the engine cover is applied with less inside space for margin or allowance, and accordingly, it is generally difficult to arrange any member or equipment such as intake duct without technological effort. In fact, all of the cited references fail to disclose or teach such margin or allowance inside the engine cover of the outboard motor for arranging the intake duct.

On the other hand, in the present invention, the inventor created such an allowance for space inside the engine cover to arrange the intake duct between the intake manifold and a side surface of the engine. For the above purpose, in the present invention, the intake manifold has a shape curved along an inner surface of the outer cover of the outboard motor and has a plurality of intake pipes in a vertical arrangement on a side of the engine, as additionally defined in the Claim 12. According to this arrangement, the intake duct is disposed between the intake manifold and the side surface of the engine.

This arrangement is not a mere obvious choice of mechanical design, as suggested in the Official Action, but rather the advantageous arrangement of feature recited in Claim 12 provides the following advantageous merits.

1.) The location of the intake duct allows outer air taken in through the intake port to be guided to the intake duct via a short distance, and thus the air is less likely to be warmed in

the engine cover, and thus the air is fed in a relatively cooled state, which contributes to the improvement of the output performance of the engine.

2.) Since the intake duct is arranged inside in between the intake manifold and the side of the engine, the intake duct will not interfere with a worker performing work when the engine cover being removed, and moreover, there is less possibility of colliding with the intake duct.

3.) The fuel is vaporized (gasified) in the intake pipe and absorbs heat of vaporization, so that a relatively low temperature is kept around the intake manifold in the engine cover. Accordingly, by arranging the intake duct inside in between the intake manifold and the side of the engine, more cooled air can be supplied to the engine, thus contributing to an increase in power output and performance of the engine.

As mentioned above, the present invention recited in independent Claim 12 is not obvious over the cited references since the cited references fail to disclose, either when taken singularly or in combination, all of the express limitations recited in Claim 12, and since the unique configuration defined in Claim 12 attains the many advantageous effects mentioned above that are not taught or suggested by the cited references.

The Kashima reference fails to teach or suggest an intake duct as recited in Claim 12. The Kashima reference describes an air induction system in which air is drawn in through a vent (not shown) formed in the cowling (20). The Kashima reference mentions that the vent is formed in an upper and rearwardly facing portion of the main cover portion (24) to reduce the induction of water or mist. (Column 5, lines 36-45.) The Kashima reference indicates that from within the cowling (20), air is drawn into the induction system through an air intake

chamber (72) through an air inlet (not shown) formed near the top of the intake chamber (72)(column 5, lines 46-50), which is far from a fuel injector unit. The Kashima reference does not disclose or even suggest an intake duct connected to an upstream side of an intake passage and disposed in a space formed between a side surface of the engine and the intake manifold, as recited in Claim 12.

Additionally, the Katayama reference fails to supplement the deficiencies noted above in the teachings of the Kashima reference, since the Katayama reference does not teach or suggest an intake duct as recited in Claim 12. The Katayama reference describes a system in which air enters into the silencer (200) through an opening depicted in Figure 10, which is far from a fuel injector unit. The Katayama reference does not disclose or even suggest an intake duct connected to an upstream side of an intake passage and disposed in a space formed between a side surface of the engine and the intake manifold, as recited in Claim 12.

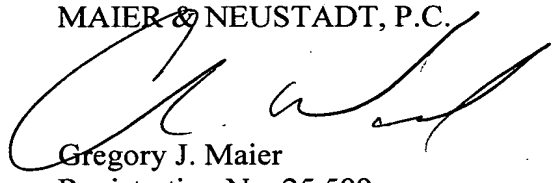
Additionally, the Watanabe et al. reference fails to supplement the deficiencies noted above in the teachings of the Kashima and Katayama references, since the Watanabe et al. reference does not teach or suggest an intake duct as recited in Claim 12. The Watanabe et al. reference describes a system in which a top cowling member (60) has at least one air intake opening, which is preferably disposed on its rear and top portion. Thus, ambient air enters the closed cavity (66), and then enters each plenum chamber member (122) through an inlet port (124). However, the inlet port (124) is located far from a fuel injector unit. Thus, the Watanabe et al. reference does not disclose or even suggest an intake duct connected to an upstream side of an intake passage and disposed in a space formed between a side surface of the engine and the intake manifold, as recited in Claim 12.

Accordingly, the Applicant submits that Claim 12 is not obvious in view of the combination of the Kashima, Katayama, and Watanabe et al. references. Thus, the Applicant respectfully requests the withdrawal of the obviousness rejection of Claim 12, and Claims 13-15 which depend from Claim 12.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Registration No. 25,599
Attorney of Record

Christopher D. Ward
Registration No. 41,367

Customer Number
22850
Tel. (703) 413-3000
Fax. (703) 413-2220
(OSMMN 10/01)

GJM:CDW:brf
I:\atty\cdw\24xxxx\245838US3\am3.doc